



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
AND ENVIRONMENTAL CONTROL  
**DIVISION OF WASTE AND HAZARDOUS SUBSTANCES**  
**SOLID AND HAZARDOUS WASTE MANAGEMENT SECTION**

89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

TELEPHONE: (302) 739-9403  
FAX: (302) 739-5060

**Permit SW-00/01**  
**Permit Type: Sanitary Landfill**

Effective Date: May 17, 2000

Last Modified: [INSERT DATE OF MODIFICATION]

Expiration Date: March 19, 2020

Permittee: Delaware Solid Waste Authority  
1128 S. Bradford Street  
Dover, Delaware 19901

Pursuant to 7 Del. C., Chapter 60, Section 6003 and Delaware's *Regulations Governing Solid Waste*, approval of the Department of Natural Resources and Environmental Control is hereby granted to operate the Southern Solid Waste Management Center sanitary landfill located at 28560 Landfill Lane in Georgetown, Delaware, near Jones Crossroads, subject to the terms and conditions of this permit. All terms and conditions of this permit are enforceable by the Department.

---

Alison Kiliszek  
Engineer  
Solid & Hazardous Waste Management Section  
(302) 739-9403

---

Date

---

Nancy C. Marker  
Environmental Program Administrator  
Solid & Hazardous Waste Management Section  
(302) 739-9403

---

Date

*Delaware's good nature depends on you!*

## Table of Contents

<b>I.</b>	<b>GENERAL CONDITIONS .....</b>	<b>1</b>
A.	Permit Issuance.....	1
B.	Applicability .....	1
C.	Application Documents .....	1
D.	General Conditions .....	2
<b>II.</b>	<b>CONSTRUCTION [RESERVED] .....</b>	<b>3</b>
<b>III.</b>	<b>MAINTENANCE OF LONG-TERM INTERMEDIATE COVER, CELLS 1 AND 2.....</b>	<b>3</b>
A.	Closure Status of Cells 1 and 2.....	3
B.	Inspection of Long-term Intermediate Cover .....	4
C.	Repair Procedures.....	4
D.	Record of Repairs .....	4
E.	Closure in the Event of Failure.....	4
F.	Incorporation into a Standard Capping System .....	4
G.	Termination of the Demonstration Project .....	4
<b>IV.</b>	<b>OPERATIONS .....</b>	<b>5</b>
A.	General Operations.....	5
B.	Protection of Control Systems .....	5
C.	Staffing .....	5
D.	Equipment .....	5
E.	Landfilling Plan.....	6
F.	Acceptable Wastes.....	6
G.	Prohibited Wastes.....	6
H.	Asbestos.....	6
I.	Disposal of Tires.....	7
J.	Waste Inspection/Waste Screening.....	7
K.	Scavenging .....	7
L.	Salvaging .....	7
M.	Daily Cover .....	8
N.	Intermediate Cover .....	9
O.	Stormwater Management.....	10
P.	Gas Extraction and Odors.....	12
Q.	Leakage Detection System Management for Cells 3, 4, and 5 .....	13
R.	Leachate Management.....	14
S.	Litter Control.....	15
T.	Dust Control .....	15
U.	Health and Safety .....	16
V.	Contingency.....	16
W.	Training .....	17
X.	Household Hazardous Waste (HHW) Collection Program .....	17
Y.	Alternate Daily Cover (ADC) Processing, Management, and Utilization .....	17
<b>V.</b>	<b>MONITORING .....</b>	<b>18</b>
A.	General Requirements .....	18
B.	Surface Water Monitoring .....	20
C.	Groundwater Monitoring .....	21
D.	Leakage Detection System Monitoring for Cells 3, 4 and 5 .....	23
E.	Leachate Monitoring .....	23
F.	ADC Monitoring and Performance and Analytical Criteria .....	24

<b>VI.</b>	<b>REPORTING .....</b>	<b>25</b>
A.	Financial Assurance.....	25
B.	Annual Operations Report.....	25
C.	Annual Environmental Monitoring Report.....	26
D.	Additional Reports.....	27
E.	Emergency Reporting.....	29
F.	Assessment of Corrective Measures .....	30
<b>VII.</b>	<b>RECORDKEEPING.....</b>	<b>31</b>
A.	General Recording and Maintenance.....	31
B.	On-site Records .....	31
C.	Department Approvals for Alternate Covers .....	32
<b>VIII.</b>	<b>LANDFILL CAPPING /CAP-AS-YOU-GO SYSTEMS.....</b>	<b>32</b>
A.	Capping/Cap-As-You-Go Requirements.....	32
B.	Final Slopes .....	33
C.	Protection of the Cap-As-You-Go Portions until Facility Closure .....	33
<b>IX.</b>	<b>CLOSURE AND POST-CLOSURE CARE .....</b>	<b>33</b>
A.	Closure in Accordance with DRGSW .....	33
B.	Notification.....	34
C.	Post-closure Care.....	34
D.	Post-closure Land Use.....	34
E.	Deed Notice .....	34
	<b>Permit Modification Synopsis .....</b>	<b>35</b>

## I. GENERAL CONDITIONS

### A. Permit Issuance

On May 17, 2000, the Department of Natural Resources and Environmental Control (Department) issued permit SW-00/01 to the Delaware Solid Waste Authority (DSWA), 1128 S. Bradford Street, Dover, DE 19901. The Department issued permit SW-00/01 for the continued operation of the sanitary landfill located at the Southern Solid Waste Management Center (SSWMC) 28560 Landfill Lane in Georgetown, Delaware pursuant to Sections 2.5.2, 4.1.1.1, and 5 of Delaware's *Regulations Governing Solid Waste* (DRGSW). On **[INSERT DATE OF MODIFICATION]**, the Department re-issued permit SW-00/01 for the continued operation of the landfill following the integration of DSWA's BUD #28 requirements and other modifications to update permit language.

### B. Applicability

This permit applies to:

1. Operation and maintenance of the SSWMC, including Cells 1, 2, 3, 4, and 5.
2. Environmental monitoring, recordkeeping, and reporting for the SSWMC.
3. Long-term intermediate cover demonstration for Cells 1 and 2.
4. Cap-As-You-Go portions of the SSWMC.
5. Household hazardous waste collection.
6. On-site Alternate Daily Cover (ADC) Processing.

### C. Application Documents

1. This permit was issued on May 17, 2000 in accordance with the following documents submitted by the DSWA:
  - a. *Cell 4 Disposal Area, Application to Construct and Operate Sanitary Waste Landfill*; prepared by Camp Dresser & McKee Inc. and dated September 1999, with revisions dated January 11, 2000, March 14, 2000, March 17, 2000, and May 2, 2000.
  - b. *Cell 4 Disposal Area and Related Facilities, Permit Drawings*; prepared by Camp Dresser & McKee Inc. containing drawings G-1, G-2, C-1 through C-15, D-1 through D-9, M-1, OP-1, and OP-2; dated September 27, 1999 with revisions submitted on March 15, 2000.

2. Following DSWA's request for a major modification, the Department modified and re-issued permit SW-00/01 on March 19, 2010 in accordance with the following documents:
  - a. *Cell 5 Disposal Area, Application to Construct and Operate Sanitary Waste Landfill*; prepared by Camp Dresser & McKee Inc. and dated January 2008, with revisions dated September, 2008 and February, 2009.
  - b. *Cell 5 Disposal Area and Related Facilities, Permit Drawings*; prepared by Camp Dresser & McKee Inc. containing drawings G-1 through G-7, C-1 through C-7, M-1, D-1 through D-11, GC-1 through GC-6, OP-1 through OP-8; dated January 2008, with revisions dated September, 2008 and February, 2009.
  - c. Secretary's Order No. 2010-A-0001.
3. The Department modified and re-issued permit SW-00/01 on **[INSERT DATE OF MODIFICATION]** in accordance with the following documents:
  - a. Beneficial Use Determination (BUD) Application dated January 20, 2016.
  - b. *Report on Evaluation of Exposed Geomembrane Cover System at Cells 1 and 2* dated July 2016 and supporting documents.
  - c. *Southern Solid Waste Management Center Plan of Operation* updated February 2017.
4. Other plans, letters, procedures, and policies specifically referenced in this permit.
5. All previously approved and applicable documents, applications, or correspondence.

**D. General Conditions**

This permit is issued subject to the following general conditions:

1. Construction and operations at SSWMC shall be conducted in compliance with all federal, state, county, and municipal environmental statutes, ordinances, and regulations, including, but not limited to: Delaware's *Regulations Governing Solid Waste*, Delaware's *Regulations Governing Hazardous Waste*, Delaware's *Regulations Governing the Control of Water Pollution*, the *Delaware Surface Water Quality Standards*, Delaware's *Regulations Governing the Construction and Use of Wells*, and the Delaware's *Regulations Governing the Control of Air Pollution*.
2. Access to the SSWMC site by unauthorized persons shall be prevented by barriers, fences, and gates, or other suitable means. Access for the purpose of disposal of solid waste shall be limited to those times when an attendant is on duty and to those persons authorized to use the site for the disposal of solid waste. The Department may, at any reasonable time, enter the SSWMC to verify compliance with the permit and DRGSW.

3. This Permit may be revoked upon violation of any condition of the permit or any requirement of DRGSW after notice and opportunity for hearing in accordance with 7 Del. C., Chapter 60. The Department has the authority to modify this permit at any time.
4. Permit SW-00/01 shall expire no later than March 19, 2020.
5. A copy of the most current version of this permit shall be maintained in both the scale house and the on-site office at the SSWMC.
6. Yard waste diversion
  - a. Effective January 1, 2011, yard waste has been banned for disposal at the SSWMC.
  - b. The DSWA shall continue to educate the public and the waste haulers, as needed, of:
    - (1) the effective date of the ban,
    - (2) the fact that yard waste can no longer be commingled with trash as a means of disposal,
    - (3) the reasoning behind prohibiting the landfilling of yard waste,
    - (4) the alternatives to manage yard waste as a result of the ban, and
    - (5) the consequences of failing to comply with the ban.
  - c. DSWA shall provide yard waste drop off for residents at all of its permitted solid waste facilities throughout Sussex County where homeowners would be permitted to drop off their yard waste.
  - d. "Yard Waste" means plant material resulting from lawn maintenance and other horticultural gardening and landscaping activities and includes yard clippings, leaves, prunings, brush, shrubs, garden materials, Christmas trees, and tree limbs up to 4 inches in diameter.

## **II. CONSTRUCTION [RESERVED]**

## **III. MAINTENANCE OF LONG-TERM INTERMEDIATE COVER, CELLS 1 AND 2**

### **A. Closure Status of Cells 1 and 2**

Until otherwise demonstrated in writing, the exposed geomembrane shall be regulated as an alternative intermediate cover in accordance with DRGSW, Section 5.9.2.3. Since these cells will not be considered closed during the demonstration project, the DSWA must continue to meet all regulatory requirements for non-closed cells (i.e., annual reports, annual closure and post-closure cost estimate updates, and financial assurance considerations).

B. Inspection of Long-term Intermediate Cover

Inspection of the long-term intermediate cover shall include a monthly walkover inspection of the exposed geomembrane cap. Inspections shall, as a minimum, identify problems and initiate maintenance in accordance with Section 3 of the *Operations and Maintenance Manual, Geomembrane Cap, Cells 1 and 2* updated August 2016 (Appendix G of the Plan of Operation).

C. Repair Procedures

Repairs done on the geomembrane material shall be in accordance with the manufacturer's recommendations. Written procedures for repair of the geomembrane shall be available to, and followed by staff designated to make repairs on the exposed geomembrane.

D. Record of Repairs

DSWA shall record the location and size of all repairs made on the geomembrane. Repair location records shall be maintained to the scale and detail necessary to be able to actually locate each repair in the future.

E. Closure in the Event of Failure

If the Department determines that the geomembrane has failed to comply with the requirements of DRGSW, allows the migration of off-site odors, creates a health or safety risk, or its structures fail to properly manage stormwater, the DSWA shall close Cells 1 and 2 in accordance with DRGSW. Within 60 days of notification that closure is required, the DSWA shall submit a closure plan and schedule for Department review and approval. The Department may require other interim measures to protect human health and the environment during this period.

F. Incorporation into a Standard Capping System

Prior to its incorporation into a standard capping system required by DRGSW, the geomembrane shall be evaluated to determine its quality and suitability for such use. Incorporation into a standard capping system shall proceed only after the approval of the Department.

G. Termination of the Demonstration Project

The demonstration period shall expire no later than **[INSERT DATE 10 YEARS AFTER PERMIT MODIFICATION DATE]**. No later than **[INSERT DATE 1.5 YEARS PRIOR TO DEMONSTRATION EXPIRATION DATE]**, DSWA shall complete an evaluation of the quality of the membrane material and its performance during the demonstration period and provide that evaluation along with recommendations to the Department for its review. Unless an extension of the demonstration project is approved by the Department, DSWA shall, no later than **[INSERT DATE 10 MONTHS PRIOR**

**TO DEMONSTRATION EXPIRATION DATE]**, submit a plan and schedule to install a final cap in accordance with the requirements of DRGSW.

#### **IV. OPERATIONS**

##### **A. General Operations**

DSWA shall operate the SSWMC in accordance with this permit and the *Southern Solid Waste Management Center Jones Crossroads Landfill, Georgetown, Delaware Plan of Operation* (the Plan of Operation) dated January 2008 and as revised February 2017. DSWA shall operate the SSWMC in a manner that will preclude degradation of adjacent land, air, surface water, or groundwater.

##### **B. Protection of Control Systems**

1. The DSWA shall operate the SSWMC in a manner that will protect landfill liner systems, gas control systems, landfill cap systems, and leachate collection, storage, and distribution systems.
2. The DSWA shall take special precautions while placing the first two (2) feet of the first lift of solid waste. Incoming waste shall be screened to identify preferential loads to be used for the initial lift. Waste that contains solid waste that may be detrimental to the liner system shall be diverted to an active area where the initial first two (2) feet of waste are already in place. A spotter shall be present during initial lift placement to identify and remove objects that may cause damage to the liner system.
3. The DSWA shall limit the height of the waste placed over tire chips, installed in limited areas as part of the protective cover on the liner system along the North and West boundaries of Cell 4, to 67 feet.

##### **C. Staffing**

Sufficient numbers and types of trained personnel shall be available at the site to insure capability for operation in accordance with DRGSW and the Plan of Operation.

##### **D. Equipment**

Equipment necessary to ensure the operations of the landfill in accordance with the Plan of Operation and the requirements of DRGSW shall be maintained at the site by the DSWA. This shall include at least one (1) backup leakage detection system and leachate collection system pump for each cell. Backup pumps must be compatible with the existing control and alarm systems and capable of withdrawing leachate from the leachate collection system and leak detection system. DSWA shall use appropriate measures to manage leachate during power outages. These measures may include vacuum trucks, electrical generators, pumps with alternative power supplies, or other effective means. DSWA may rely on the capacity of the landfill collection system for the short-term power outages. Generators



shall be used in accordance with Delaware's *Regulations Governing the Control of Air Pollution*.

E. Landfilling Plan

DSWA shall fill and grade the landfill in accordance with previously approved permitting applications, which limits the maximum elevation of the landfill to no higher than 220 feet mean sea level (msl) in Cells 3 and 4 and 350 feet msl in Cell 5. Landfilling in Cell 5 includes overfilling onto Cells 3 and 4 to reach 350 feet msl.

F. Acceptable Wastes

SSWMC is permitted to accept the following wastes for disposal at the facility in accordance with DRGSW:

1. Municipal solid waste defined as household waste and solid waste that is generated by commercial, institutional, and industrial sources and is similar to household waste.
2. Non-hazardous industrial wastes or sludges, oil spill debris, or other related wastes not included in the municipal solid waste stream which have been accepted in accordance with the *Delaware Solid Waste Authority Policy on Special Solid Wastes*, adopted by the Board of Directors on December 7, 1995, and revised October 27, 2005.
3. Dry Waste.

G. Prohibited Wastes

The DSWA shall exercise reasonable care in accordance with the *Delaware Solid Waste Authority Solid Waste Screening Program*, dated September 19, 1997 and the Plan of Operation to ascertain whether waste accepted at the facility is prohibited waste, and shall not accept the following prohibited waste.

1. Regulated hazardous waste.
2. Regulated infectious waste.
3. Licensed radioactive material (as described in the *Delaware Radiation Control Regulations*), and any radioactive material considered source, special nuclear, or by-product material as defined by Atomic Energy Act of 1954.
4. Liquid waste as restricted by 40 CFR Part 258.28.

H. Asbestos

The DSWA shall not accept regulated asbestos-containing material for disposal into any landfill cell at the SSWMC. Regulated asbestos-containing solid waste may be accepted

if properly packaged and placed into designated roll-off containers for transfer to and disposal at an approved disposal facility. Asbestos receipt, storage, handling, and transfer shall be done in accordance with the DSWA's *Asbestos Policy and Procedures*, effective April 1, 1995 and last revised April 15, 2002.

I. Disposal of Tires

The DSWA shall not accept for disposal at SSWMC, whole tires in quantities greater than ten (10) per truckload or as allowed by Delaware's *Regulations Governing Solid Waste*, whichever is more restrictive.

J. Waste Inspection/Waste Screening

Waste inspection of all incoming loads as well as random waste screening shall be in accordance with the *Delaware Solid Waste Authority Solid Waste Screening Program*, dated September 19, 1997 and the Plan of Operation. All landfill personnel responsible for waste inspection, including weigh masters, heavy equipment operators, and inspector/spotters, shall comply with these procedures.

K. Scavenging

Scavenging on the landfill is prohibited.

L. Salvaging

1. Salvaging shall be conducted in accordance with the Plan of Operation and in a manner protective of human health and the environment. Salvaging operations shall not interfere with the proper disposal of wastes at the facility.
2. DSWA shall inspect stockpile areas at least once each operating day to ensure that unwanted solid wastes (such as trash) have not been deposited. Such solid wastes shall be removed for proper disposal no later than the next business day. DSWA shall record the results of these inspections.
3. Loads of dry waste may be diverted to a designated area on the lined area of the landfill for salvaging. Salvaged dry waste shall not include solid waste prohibited by Condition IV.G of this permit, special wastes, or regulated asbestos-containing solid wastes.
4. Salvaging for Alternate Daily Cover (ADC) Processing
  - a. The waste items listed in Appendix B – Unacceptable Dry Waste located within Appendix C – Alternate Daily Cover and Alternate Intermediate Cover of the Plan of Operation shall be removed from solid wastes destined to be processed for ADC and separately disposed of, recycled, or rejected in accordance with this permit. Wastes identified as unacceptable for processing into ADC shall be removed from the ADC processing area not less than once per operating week. If unacceptable

wastes are not placed on the working face at the end of the day on which they are received, DSWA shall conduct daily inspections and shall maintain the unacceptable waste pile as necessary to prevent issues with dust, litter, vectors, fire, and odors. In the event a problem arises, DSWA shall take appropriate measures to eliminate the problem on the same business day, which may include placing waste acceptable for landfilling onto the working face of the landfill. Prohibited or unacceptable waste delivered to the dry waste recycling area will be handled in accordance with the Plan of Operation for dry waste recycling.

- b. Attendants shall focus on prohibiting the acceptance of wastes, which are, or are mixed with, used or waste oils or wastes with petroleum contamination. Successful screening to remove these wastes shall eliminate the need to perform sampling and analysis of Total Petroleum Hydrocarbons (TPH).
- c. Attendants shall attempt to divert drywall from dry waste accepted for processing into ADC.
- d. DSWA shall not accumulate more than 5,000 tons of acceptable dry waste for processing into ADC at any given time. No more than two (2) stockpiles with the combined quantity of less than 5,000 tons may be used to accumulate the acceptable dry waste prior to processing.

#### M. Daily Cover

The DSWA shall place daily cover consisting of a six-inch layer of suitable material over all disposed solid waste by the end of each working day.

1. Daily cover shall control odors, disease vector breeding, animal attraction, blowing litter, scavenging; as well as reduce the potential for fires. No solid waste shall remain exposed after the end of an operating day.
2. DSWA shall strive to ensure that daily covers left in place under waste do not hinder leachate flow downwards towards the leachate collection system.
3. At least weekly, DSWA shall inspect exposed daily covers that remain in place for more than two (2) days and shall record the results of these inspections. DSWA shall maintain these daily covers, as necessary, to control odors, disease vector breeding, animal attraction, blowing litter, scavenging, and fires. DSWA shall maintain adequate surface water management controls to prevent erosion of the daily cover. DSWA shall maintain these daily covers to prevent wastes from being exposed. In the event waste is found to be exposed, DSWA shall take appropriate actions to ensure all wastes are no longer exposed by the end of the operating day.
4. Department approved alternative daily covers may be used only if those covers perform as well as standard daily cover soil and are used and maintained in a manner that does not present an increased threat to human health or the environment. Additionally, the

DSWA shall store, use, and maintain alternate daily cover material in accordance with the Plan of Operation and this permit. DSWA shall not use an alternative daily cover without the written approval of the Department's SHWMS, and the DSWA shall maintain written approvals for all alternative covers used at the landfill in accordance with Condition VII.C of this permit.

5. DSWA may use tarps as daily cover in accordance with the Plan of Operation. When tarps are used, DSWA shall deploy them in a manner that ensures that all solid wastes on that day's working face are covered and remain covered until the next operating day. DSWA shall use soil or other approved daily covers as necessary to supplement tarps if needed to ensure coverage of solid wastes. Tarps will be sufficiently weighted or anchored to prevent the movement of tarps and the exposure of waste during non-operating hours.

#### N. Intermediate Cover

DSWA shall apply intermediate cover to any area that receives daily cover and is not expected to receive either additional solid waste or a capping system within six months.

1. Intermediate cover shall consist of at least 12 inches of compacted soil (total), or an alternative material approved by the Department for use as an intermediate cover. Intermediate cover shall control odors, disease vector breeding, animal attraction, blowing litter, scavenging and reduce the potential for fires. Intermediate cover shall prevent leachate from entering stormwater management systems or surface waters.
2. DSWA shall strive to ensure that intermediate cover layer which remains in place under waste shall not hinder leachate flow downwards towards the leachate collection. If the intermediate cover has been placed to reduce infiltration of water into the landfill, DSWA shall remove or otherwise modify it to allow leachate to move downwards towards the leachate collections system prior to placement of additional solid waste on the intermediate cover.
3. At least weekly, DSWA shall inspect intermediate covers and shall record the results of these inspections. DSWA shall maintain all intermediate covers, as necessary, to control odors, disease vector breeding, animal attraction, blowing litter, scavenging and fires. DSWA shall maintain adequate surface water management controls to prevent erosion of intermediate covers. DSWA shall maintain these covers to prevent wastes from being exposed.
4. Tarps:
  - a. Tarps installed in accordance with the Plan of Operations may be used for alternative intermediate cover on Cells 3, 4, and 5 as long as they are properly anchored, comply with the requirements of DRGSW, and their use controls stormwater, odors, disease vector breeding, animal attraction, blowing litter,

scavenging, and reduces the potential for fires, and prevents leachate from entering stormwater management systems or surface waters.

- b. In the event that the use of tarps for intermediate cover results in a violation of the permit or DRGSW, the Department may require that the DSWA terminate the use of tarps for intermediate cover on all or part of the landfill cells. DSWA shall, within 30 days of such notification, install standard intermediate cover in those areas.
5. Department approved alternative intermediate covers may be used only if those covers perform as well as standard intermediate cover soil and are used and maintained in a manner that does not present an increased threat to human health or the environment. Additionally, the DSWA shall store, use, and maintain alternate intermediate cover material in accordance with the Plan of Operation. DSWA shall not use an alternative intermediate cover without the written approval of the Department's SHWMS, and the DSWA shall maintain written approvals for all alternative covers used at the landfill in accordance with Condition VII.C of this permit.

#### O. Stormwater Management

DSWA shall provide for storm water management and erosion and sediment control at the facility including those controls cited in the Plan of Operation. DSWA shall implement the following minimum controls:

1. DSWA shall take all necessary steps to identify and prevent the discharge of pollutants from the waste into surface water and shall initiate corrective actions to confirm, quantify, and remediate such discharges. For the purposes of this permit, contaminated stormwater means stormwater which comes in direct contact with landfill wastes or landfill wastewater. Landfill wastewater means all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated stormwater, and groundwater from monitoring or production wells on-site. Landfill wastewater includes leachate, gas collection condensate, laboratory derived wastewater, contaminated stormwater, and contact washwater used to wash solid wastes from equipment.
2. In accordance with the Plan of Operation and the conditions of this permit, DSWA shall properly operate, inspect, manage, and maintain all devices, structures, conveyances, and ponds designed to monitor or manage stormwater.
3. The DSWA shall maintain a stormwater management system on the landfill to prevent erosion of the waste and cover, prevent the accumulation of standing water, and minimize stormwater water runoff into the waste. The stormwater conveyance and discharge system (SCDS) shall be kept free of leachate (including condensate from the gas collection system), debris, waste, and sediment buildup.

- a. DSWA shall ensure that contaminated stormwater from operation on the landfill is directed to the leachate collection system.
  - b. DSWA shall inspect the stormwater management system on the landfill monthly and immediately after any rainfall capable of causing erosion or surface run-off or on the next operating day if rainfall occurs while the facility is not operating. DSWA shall record the results of the inspections, maintain records of these inspections and of their findings, and the actions taken to correct observed deficiencies. Inspections shall, at a minimum, include:
    - (1) Berms and swales shall be inspected for erosion, sedimentation, and debris.
    - (2) Silt fences shall be inspected for damage, accumulated debris, and to ensure that fencing is firmly anchored.
    - (3) Culverts and pipes shall be inspected for siltation, blockage, and debris.
    - (4) Control structures and outfalls shall be inspected for siltation, debris, and damage. If stormwater is flowing at the time of the inspection, DSWA shall visually inspect that discharge for color, sheen, floating debris, and sediment laden stormwater. DSWA shall record their observations from the visual inspection, describing any odor noted as well.
  - c. DSWA shall coordinate stormwater pond cleanout or maintenance involving structural repair of the ponds with the DNREC Sediment and Stormwater Program or DNREC Division of Water, as applicable.
4. The DSWA shall take all reasonable steps to identify and prevent the discharge of stormwater contaminated from landfilling activities, including equipment maintenance and salvage operations, into surface water, primarily Asketum Section and Beaverdam Branch. In areas where waste is handled or stored off the landfill cells, and in areas where the Permittee conducts equipment maintenance, washing or refueling DSWA shall use Best Management Practices to eliminate or reduce the contact of solid waste and petroleum products with stormwater.
  5. DSWA shall inspect for leachate seeps at least once each operating day and shall take all practicable steps to prevent leachate from contaminating surface water, including stormwater ponds and conveyances located off the lined areas of the landfill. DSWA shall maintain records of the inspections and of their findings and actions taken to prevent leachate from contaminating surface water. If leachate is found to be contaminating surface water, DSWA shall report this in accordance with Condition V.I.E of this permit and shall initiate immediate corrective measures to stop the contamination and to manage the contaminated surface water as landfill wastewater. Until the DSWA has completed necessary corrective measures, they shall conduct daily visual inspections of impacted/potentially impacted surface waters. DSWA shall also initiate additional environmental sampling in accordance with Condition V.A.4 of this permit.

6. To ensure that stormwater has not been contaminated, DSWA shall inspect accumulated stormwater in secondary containment structures prior to releasing it. DSWA shall visually inspect the accumulated liquid for color, sheen, and odor. If the visual inspection indicates that the stormwater could be contaminated, DSWA shall conduct additional testing of the liquid to determine if it is wastewater, and DSWA shall not release wastewater to surface waters at the SSWMC. If field instruments are used during the monitoring, DSWA shall ensure that these instruments are maintained, calibrated, and utilized in accordance with manufactures instructions. DSWA shall maintain records of these inspections and of their findings and actions taken to manage the accumulated liquids.
7. To ensure that stormwater held in unused portions of Cell 5 has not been contaminated, each operating day DSWA shall inspect adjacent landfill slopes for leachate seeps. As part of this inspection, DSWA shall also inspect stormwater accumulating in the unused portions of Cell 5 for color, sheen, and odor. If the visual inspection indicates that the stormwater could be contaminated, DSWA shall conduct additional testing of the liquid to determine if it is wastewater, and DSWA shall not release wastewater to surface waters at the SSWMC. If field instruments are used during the monitoring, DSWA shall ensure that these instruments are maintained and utilized in accordance with manufactures instructions. DSWA shall maintain records of these inspections and of their findings and actions taken to manage the accumulated liquids.
8. If field instruments are used during SCDS monitoring or inspecting, DSWA shall ensure that these instruments are maintained, calibrated, and utilized in accordance with manufacturer's instructions.

P. Gas Extraction and Odors

1. The DSWA shall operate and maintain the gas extraction system and flares to control odors. Malodorous gaseous emissions from the landfill shall be controlled to the extent that there is no perceivable landfill odor beyond the property boundary. DSWA shall maintain a permit for the operation of the extraction system and flares in accordance with Delaware's *Regulations Governing the Control of Air Pollution*.
2. DSWA shall operate the dry waste salvage area and process dry waste in a manner that prevents odors.
3. The DSWA shall record all odor complaints they receive concerning the SSWMC and shall investigate complaints in a timely manner. DSWA shall maintain records of the odor complaints as well as DSWA findings and any actions taken to preclude landfill odors from moving beyond the property boundary.
4. Gas migration monitoring (Section 5.5.1.3, DRGSW) shall be performed at least quarterly and shall be done in accordance with the *DSWA Southern Solid Waste Management Center (SSWMC) Gas Migration Monitoring Plan*, updated March 2010. The concentration of landfill gas in facility structures (except gas recovery systems)

and at the facility boundary shall not exceed 25% of the Lower Explosive Limit (LEL). Gas monitoring shall be performed:

- a. In structures within 1000 feet of the landfill, as noted on the monitoring plan;
  - b. Outside the landfill in the perimeter gas piezometers (PGP-1 through PGP-18) and at the landfill fence line, as noted on the monitoring plan.
5. Perimeter Gas Piezometers (PGP-1 through PGP-18) shall be maintained to ensure that the piezometer's design features for all landfill gas monitoring will be performed under the requirements in *DSWA Southern Solid Waste Management Center (SSWMC) Gas Migration Monitoring Plan*, updated March 2010.

Q. Leakage Detection System Management for Cells 3, 4, and 5

1. The DSWA shall monitor all leak detection system flowmeters, pumps, controls, and recording devices each operating day to ensure proper functioning and recording of flows. The DSWA shall inspect for leakage from valves, flowmeters, and connections at riser locations each operating day. The results of the inspections shall be recorded in the facility log.
2. The leak detection system shall be capable of measuring the rate and quantity of flow from each sub-cell or sump area on a daily basis, and shall be capable of sampling the liquid from each sub-cell or sump area.
3. The action leakage rate (ALR) for the leak detection system for each sub-cell or sump area at the SSWMC shall be based upon a monitoring period no longer than seven days. ALR's are as follows:
  - a. Cell 3: 20 gallons/acre/day
  - b. Cell 4: 20 gallons/acre/day
  - c. Cell 5: 28 gallons/acre/day
4. If the ALR is exceeded the DSWA shall follow the requirements of *Section 12.4 – Action Leakage Rate* from the Plan of Operation.
5. Cleaning and Assessment of the system:
  - a. The DSWA shall ensure that the leak detection system collection pipes are cleaned at least once every two (2) years with a self-propelled, high-pressure jetting system. The DSWA shall be responsible for the identification, assessment, and reporting of all blockages encountered as well as identification of any areas found to be inaccessible during the cleanings. The Department may, at its discretion, waive the cleaning event for any particular year if, after demonstration by the DSWA, it determines that cleaning is not required.



- b. At least once every four (4) years, collection pipes, or representative sections of collection pipes, in each cell shall be inspected by camera to assess their condition. This shall include a written assessment of the condition of the leachate collection pipes to include an assessment of clogging of pipe perforations and the location, cause, and effect of blockages encountered. In the event that such an assessment supports the DSWA claim that less frequent cleanings are needed, the DSWA may initiate a request for a permit modification to reduce the cleaning frequency.

#### R. Leachate Management

1. The DSWA shall operate and maintain the leachate collection, transmission, storage and recirculation system, including all alarm systems in accordance with this permit and the Plan of Operation. The DSWA shall clean-up all leachate spills immediately or within a time frame approved by the Department on a case-by-case basis.
2. The DSWA shall monitor all leachate collection system flowmeters, pumps, controls, recording devices and storage tanks each operating day to ensure proper functioning and recording of flows. The DSWA shall inspect for leakage from valves, flowmeters, connections at riser locations, and storage tanks each operating day. The results of the monitoring and inspections shall be recorded in the facility log.
3. The DSWA shall inspect secondary containment systems under leachate storage tanks each operating day and shall remove stormwater or other liquids, as needed, to maintain the holding capacity necessary to contain leachate from a tank rupture. DSWA shall release stormwater only in accordance with Condition IV.O.7 of this permit.
4. The DSWA shall maintain all necessary permits and approvals for leachate storage and disposal management.
5. The leachate collection system shall be capable of measuring the rate and quantity of leachate flow from each sub-cell or sump area on a daily basis, and shall be capable of sampling the leachate from each sub-cell or sump area.
6. The DSWA shall measure and record the quantity of leachate pumped from each leachate sump on a weekly basis. The DSWA shall also record weekly the quantity of leachate recirculated in each cell and the quantity of leachate shipped
7. Leachate recirculation shall be allowed only with prior written approval of the Department in accordance with DRGSW, Section 5.4.3.7.
8. Leachate recirculation is prohibited on any landfill cell which does not contain an operable, permitted, active landfill gas collection system.
9. Leachate recirculation shall be allowed only with prior written approval of the Department and only if it can be reasonably demonstrated that it will not result in

significant increase in odors, contamination of groundwater, or release of methane or other landfill gases to the environment.

10. Cleaning and Assessment of the System:

- a. The DSWA shall ensure that the leachate management system collection pipes are cleaned at least once every two (2) years with a self-propelled, high-pressure jetting system. The DSWA shall be responsible for the identification, assessment, and reporting of all blockages encountered as well as identification of any areas found to be inaccessible during the cleanings.
- b. At least once every four (4) years, collection pipes, or representative sections of collection pipes, in each cell shall be inspected by camera to assess their condition. This shall include a written assessment of the condition of the leachate collection pipes to include an assessment of clogging of pipe perforations and the location, cause, and effect of blockages encountered. In the event that such an assessment supports the DSWA claim that less frequent cleanings are needed, the DSWA may initiate a request for a permit modification to reduce the cleaning frequency.

S. Litter Control

DSWA shall provide for daily litter removal and general cleanliness of the entire site to include litter controls cited in the Plan of Operation. DSWA shall implement the following minimum controls:

1. DSWA shall use effective operational controls to minimize wind-blown litter from the working faces, cleanout areas, the dry waste salvage area, and the small load collection station. Controls shall include daily inspections for litter, compaction of waste upon receipt, use of fences and other barriers, and routine litter collection.
2. DSWA shall inspect for litter on the facility, including the entrance road, daily (each operating day) and ensure that litter is collected quickly and properly disposed. DSWA shall record the results of the inspections.
3. DSWA shall not allow litter to migrate from the landfill site.
4. The DSWA shall collect any off-site litter attributable to landfill operations.

T. Dust Control

1. DSWA shall provide for dust controls at the SSWMC to include dust controls cited in the Plan of Operation.
2. DSWA shall operate the landfill and the dry waste salvaging and processing area in a manner to prevent dust emissions from causing a condition of air pollution (injurious

to human, plant, or animal life or unreasonably interfering with the enjoyment of life and property).

3. DSWA shall operate the landfill to minimize soil or daily cover material from being tracked onto public roads. DSWA shall inspect facility egress points at least daily to identify if soils or materials are being tracked off-site and to gauge the extent of the problem. DSWA shall record the results of the inspections. In the event that the daily inspection finds that soils or materials are being tracked onto public roads, at a minimum DSWA shall provide for street cleaning that same day.

#### U. Health and Safety

1. The DSWA shall operate in accordance with health and safety requirements described in the approved Plan of Operation.
2. Employees at the site shall work under appropriate health and safety guidelines established by the Occupational Safety and Health Administration.
3. Use of personal protective equipment shall be in accordance with 29 CFR Part 1910.132, as a minimum.
4. First aid equipment shall be maintained and available in the scale house and in the maintenance building.
5. Emergency telephone numbers of nearby ambulance, hospital, police, and fire services, including the number for the Emergency Coordinator, shall be prominently displayed by at least one (1) telephone in each of the following on-site locations: the maintenance office, the scale house, and the administrative office.
6. Any confined space entry done by employees or contractors shall be done in accordance with 29 CFR Part 1910.146.

#### V. Contingency

1. Fire prevention and control shall be in accordance with the Plan of Operation.
2. There shall be one Emergency Coordinator and at least one alternate Emergency Coordinator appointed at the SSWMC to ensure that at least one Emergency Coordinator will be available at all times. The Emergency Coordinator shall be responsible for directing all emergency response measures necessary to protect human health and the environment in the event of fire, severe weather, explosion, or release of hazardous wastes or materials.
3. The Permittee shall maintain a current Spill Prevention, Control, and Counter-measures Plan.

#### W. Training

All personnel (except the secretary) assigned duties at the SSWMC shall receive, as a minimum, the training listed below. Unless otherwise specified by a nationally recognized training provider (for example, the American Red Cross as a training provider for First Aid), training shall be required initially and annually thereafter. Initial training for waste screening shall be completed within 60 days of hiring and all other initial training shall be completed within 180 days of hiring:

1. Operational and contingency procedures
2. Waste screening
3. Health and safety procedures
4. Fire prevention and protection
5. Emergency first aid
6. CPR training

#### X. Household Hazardous Waste (HHW) Collection Program

1. Operation of any HHW collection event held at SSWMC shall be in accordance with the *Delaware Solid Waste Authority HHW Operating and Site Safety Plan*, as revised September 2002.
2. Wastes accepted as part of the HHW collection services shall not be stored on-site overnight.
3. While HHW is being accumulated on-site, each container shall be properly labeled with the date accumulation began and the contents of the container.
4. HHW wastes shall be transported from the site by a transporter permitted to transport solid or hazardous wastes within the State of Delaware.
5. Employees handling HHW must complete initial and annual training designed to ensure that site personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems.
6. The HHW collection site shall be maintained and operated to minimize the possibility of fire, explosion, or any unplanned, sudden, or non-sudden release of waste to air, soil, or water that could threaten human health or the environment.

#### Y. Alternate Daily Cover (ADC) Processing, Management, and Utilization

##### 1. Processing of ADC

- a. Salvaging of acceptable dry waste for ADC must be in accordance with this permit.

- b. DSWA must maintain any permits and approvals necessary for all activities related to ADC processing.
- c. Soils suitable for cover, pursuant to this permit, may be added during acceptable dry waste processing to achieve the performance and analytical criteria specified in Condition V.F of this permit.

2. Management of ADC

- a. DSWA shall not accumulate more than 5,000 tons of processed ADC at any given time. Processed dry waste shall be defined as acceptable waste that has been ground on-site by DSWA for the purpose of creating ADC.
- b. Processed dry waste stockpiles shall not exceed a maximum width, length, and height of 60 feet by 300 feet by 15 feet, respectively.
- c. Processed dry waste stockpiles shall be located a minimum of 15 feet apart.
- d. Processed dry waste stockpiles shall be maintained to avoid the creation of fire hazards.

3. Utilization of ADC

- a. Processed dry waste awaiting analysis shall not be used as ADC.
- b. DSWA shall notify the Department within 48-hours of DSWA's receipt of data demonstrating that the processed dry waste exceeded the performance or analytical metals criteria specified in Condition V.F of this permit.
- c. Processed dry waste that does not achieve the performance and analytical criteria specified in Condition V.F of this permit, with the exception of percent inert and moisture, cannot be utilized as ADC and must be disposed in accordance with this permit.

## V. MONITORING

A. General Requirements

- 1. DSWA shall maintain and protect all monitoring wells in accordance with Delaware's *Regulations Governing the Construction and Use of Wells*.
- 2. DSWA shall notify the SHWMS at least 15 days prior to installing, modifying, or abandoning any monitoring wells. The installation of new monitoring wells, and the modification or abandonment of existing monitoring wells, shall be performed in accordance with Delaware's *Regulations Governing the Construction and Use of Wells*, after receiving approval from the SHWMS to proceed

3. All water-quality samples shall be conducted in a manner that minimizes sample turbidity. All groundwater-quality samples shall be collected using a low-flowrate method to minimize sample turbidity. Samples shall be collected, prepared, and shipped in accordance with the Monitoring Plan and this permit.
4. Each well's total depth shall be sounded at least once during each groundwater-sampling event. If the series of wells are to be synoptically measured at least 24-hours before the groundwater samples are collected, then each of those wells shall have their total depth sounded and recorded immediately after the static levels are recorded. If static levels are being measured within 24-hours of the time the samples are collected, then the well's soundings shall be collected immediately AFTER sample collection is completed. Sounding depths shall be recorded and compared with the sounding depth measurements recorded during the previous sampling event(s). These sounding comparisons are to assure DSWA and the Department that down-hole well integrity is intact. Wells that are used to measure only static water-levels shall be sounded for total depth immediately after the static water-level measurement has been collected. Sounded depths and static water-levels shall be recorded.
5. All water-quality samples will be measured for the following field parameters at the time of sample collection:

Dissolved Oxygen	Specific Conductance
pH	Temperature
Oxidation-Reduction Potential	Turbidity

Leachate samples do not need to record field measurements of Dissolved Oxygen or Turbidity. Leachate seep and leak detection system samples must measure and record all field parameters.

6. Water-quality laboratory-analyzed parameter sets:
  - a. SSWMC Indicator Parameters
 

Alkalinity (Total)	Manganese	Specific Conductance
Calcium	Nitrogen – Ammonia	Sulfate
Chemical Oxygen Demand	Nitrogen – Nitrate	Total Dissolved Solids
Chloride	pH	Total Organic Carbon
Iron	Potassium	Zinc
Magnesium	Sodium	
  - b. SSWMC September 2008 Monitoring Plan, updated January 2017 (Appendix F of the SSWMC's Plan of Operations), Exhibit B Tables

- (1) Table E: DNREC Supplemental Listing for Semi-Annual Analysis of Leachates (SSWMC Monitoring Plan - Table E)
  - (2) Table G: DNREC Supplemental List for Annual Analysis of Groundwaters from the SSWMC (SSWMC Monitoring Plan - Table G)
  - (3) Table H: DNREC Supplemental List for Annual Analysis of Groundwater from SC-28 (SSWMC Monitoring Plan - Table H)
7. All analysis required by this permit shall be done in accordance with the most current legal edition of “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA Publication Number SW-846. If SW-846 does not contain a test method for a required parameter, that parameter shall be tested according to methods described in the most recent edition of EPA Publication, *Methods of Chemical Analysis for Water and Wastes* or *Standard Methods for Examination of Water and Wastewater*. Other methods of analysis may be used with prior written approval from the Department. All samples shall be taken using quality assurance and quality control procedures that ensure samples are representative of actual field conditions.

#### B. Surface Water Monitoring

1. DSWA shall monitor surface water in accordance with the *Monitoring Plan for the Southern Solid Waste Management Center*, updated January 2017 (Monitoring Plan), and the requirements of this permit.
2. DSWA shall maintain the following surface water staff gauges. Quarterly, during January, April, July, and October coincident with the measurement of groundwater levels in monitoring wells, the DSWA shall measure water levels at surface water staff gauges.

A-1 (Askeetum)	B-1 (Beaverdam)	SMB-3A (stormwater pond 3A)
A-2 (Askeetum)*	B-2 (Beaverdam)	SMB-3B (stormwater pond 3B)
A-3 (Askeetum)	B-3 (Beaverdam)	SMB-3C (stormwater pond 3C)

\*A-4 depth to water and surface water elevations are measured at the A-2 staff gauge, samples for analysis are collected at the A-4 location

3. DSWA shall monitor stormwater ponds 3A, 3B, 3C, and the borrow pond (A-4) quarterly during January, April, July, and October. This quarterly monitoring shall include environmental sampling as well as visual monitoring of water being discharged from the stormwater ponds at the time of the sampling.
  - a. Visual monitoring shall document water elevation as well as the results of a visual inspection for obvious indicators of stormwater pollution. In the event there is no stormwater being discharged at the time of the quarterly environmental sampling, DSWA shall document that and shall repeat the visual monitoring as soon as practicable after the next rain event(s) until discharge is observed, inspected, and documented.

- b. The sampling of surface water shall consist of grab samples taken from the discharge of the outlet structure. DSWA shall measure the depth of liquid in the outlet structure's discharge, should water be flowing at the time of the monitoring event. The sample shall be collected from as close as practical to the discharge structure's inlet if no water is flowing at the time of the monitoring event. DSWA shall estimate the flow rate at the pond outlets each time a sample is collected. DSWA shall measure and record field parameters and collect water-quality samples for laboratory analysis for SSWMC Indicator Parameters (Condition IV.A.6.a of this permit) and the following additional parameters:

Biochemical Oxygen Demand  
Total Hardness

Total Suspended Solids

4. In the event leachate is found to be contaminating surface water, DSWA shall sample the impacted surface water (e.g., perimeter drainage ditch, swales, etc.) and the downstream stormwater pond at both the inlet and, if discharging, the outfall. Results of analysis shall be provided to the Department within seven (7) days of the receipt of results. DSWA shall record their visual observations and sample in accordance with the Monitoring Plan to include field parameters, SSWMC Indicator Parameters (Condition IV.A.6.a of this permit), and the following additional parameters:

alpha Terpineol

Arsenic

Benzoic acid

Biochemical Oxygen Demand

BTEX

Cadmium

Chromium

Copper

Lead

m/p Cresol

Mercury

Nickle

Oil & Grease (Hexane Extractable)

Oil & Grease (Silica Gel Treated)

Phenol

Silver

Tin

Total Hardness

Total Suspended Solids

#### C. Groundwater Monitoring

1. DSWA shall monitor groundwater in accordance with the *Monitoring Plan for the Southern Solid Waste Management Center*, updated January 2017, (the Monitoring Plan) and the requirements of this permit.
2. Groundwater Sampling:
  - a. Quarterly, during January, April, July, and October, the DSWA shall measure water levels within the shortest time practicable, prior to the collection of any samples, in the following wells:

SC-1	SC-8	SC-17A	SC-27	DC-3	DC-13	M-1	M-8
SC-2	SC-9A	SC-18A	SC-28	DC-4	DC-20	M-2	M-9
SC-3	SC-12	SC-20	SC-29	DC-5	DC-21	M-3	M-13
SC-4	SC-13	SC-21	SC-30	DC-6	DC-22	M-4	M-14



SC-5	SC-14	SC-23	SC-31	DC-7	DC-23	M-5	P94-1
SC-6	SC-15	SC-25	SC-32	DC-8	DC-24	M-6	P94-2
SC-7	SC-16	SC-26		DC-9	DC-25	M-7	P94-3

## b. Field Parameter Measurement Schedule:

- (1) Quarterly, in January, April, July, and October, DSWA shall record their visual observations and field parameter measurements from the following wells:

SC-2	SC-9A	SC-16	SC-22	SC-27	SC-32	DC-9	DC-23
SC-3	SC-12	SC-17A	SC-23	SC-28	DC-3	DC-13	DC-24
SC-6	SC-13	SC-18A	SC-24	SC-29	DC-6	DC-20	DC-25
SC-7	SC-14	SC-20	SC-25	SC-30	DC-7	DC-21	
SC-8	SC-15	SC-21	SC-26	SC-31	DC-8	DC-22	

- (2) Semi-annually, in April and October, DSWA shall record their visual observations and field parameter measurements from the following wells:

SC-11	DC-11	M-2	M-6	M-8	M-11	M-14
		M-3	M-7	M-9	M-13	

- (3) Annually, in April, DSWA shall record their visual observations and field parameter measurements from the following wells:

SC-1	SC-4	SC-5	DC-4	DC-5	M-1	M-4	M-5
------	------	------	------	------	-----	-----	-----

## c. Laboratory Analysis Schedule:

- (1) Semi-annually, in April and October, DSWA shall collect water-quality samples for analysis for SSWMC Indicator Parameters (Condition IV.A.6.a of this permit) from the following wells:

SC-8*	SC-15*	SC-21*	SC-26	SC-31	DC-20*	DC-25
SC-9A*	SC-16*	SC-22*	SC-27	SC-32	DC-21*	
SC-12	SC-17A*	SC-23*	SC-28 <sup>+</sup>		DC-22*	
SC-13*	SC-18A*	SC-24*	SC-29*		DC-23*	
SC-14*	SC-20*	SC-25*	SC-30*		DC-24*	

\* In April, Wells must also be analyzed for parameters listed in SSWMC Monitoring Plan - Table G

<sup>+</sup> In April, Well SC-28 must be analyzed for parameters listed in SSWMC Monitoring Plan - Table G and SSWMC Monitoring Plan - Table H

- (2) Annually, in April, DSWA shall collect water-quality samples for laboratory analysis for SSWMC Indicator Parameters (Condition IV.A.6.a of this permit) from the following wells:

SC-2	SC-7	DC-3	DC-8	DC-13	M-2	M-7	M-11
SC-3	SC-11	DC-6	DC-9		M-3	M-8	M-13
SC-6		DC-7	DC-11		M-6	M-9	M-14

#### D. Leakage Detection System Monitoring for Cells 3, 4 and 5

Quarterly, during January, April, July, and October, the DSWA shall monitor field parameters, SSWMC Indicator Parameters (Condition IV.A.6.a of this permit), as well as **arsenic** and **dissolved methane** for the following locations:

Cell 3 Subcell (3.1 SDS)	Cell 4 Subcell (East SDS)	Cell 5 Subcell (North SDS)*
Cell 3 Subcell (3.2 SDS)	Cell 4 Subcell (West SDS)	Cell 5 Subcell (South SDS)
Cell 3 Subcell (3.3 SDS)		

\*Monitoring will commence upon initiation of landfilling activities in the Northern Subcell of Cell 5

#### E. Leachate Monitoring

1. Monthly, DSWA shall monitor leachate for field parameters, SSWMC Indicator Parameters (Condition IV.A.6.a of this permit) as well as the following additional parameters at the following locations:

Arsenic	Magnesium	Sodium
Biochemical Oxygen Demand	Manganese	Total Kjeldahl Nitrogen
Calcium	Molybdenum	Total Phenolics
Copper	Nitrogen - Nitrite	Total Phosphorus
Cyanide	Phenolphthalein Alkalinity	Total Suspended Solids
Iron	Potassium	Zinc

Cell 1 (C1-PS)	Cell 2 (C2-NPS)	Cell 2 (C2-SPS)	Cell 3-4-5 Tank Farm
----------------	-----------------	-----------------	----------------------

and

Biochemical Oxygen Demand	Manganese	Total Suspended Solids
Calcium	Phenolphthalein Alkalinity	Zinc
Iron	Potassium	
Magnesium	Sodium	

Cell 3 Subcell (3.1 PCS)	Cell 4 Subcell (East PCS)	Cell 5 Subcell (North PCS)*
Cell 3 Subcell (3.2 PCS)	Cell 4 Subcell (West PCS)	Cell 5 Subcell (South PCS)
Cell 3 Subcell (3.3 PCS)		

\*Monitoring will commence upon initiation of landfilling activities in the Northern Subcell of Cell 5

2. Quarterly, DSWA shall monitor leachate for the following parameters for the below monitoring locations:

Acetic Acid	Isobutyric Acid	Propionic Acid
-------------	-----------------	----------------

## Butyric Acid

## Isovaleric Acid

## Valeric Acid

Cell 1 (C1-PS)	Cell 3 Subcell (3.1 PCS)	Cell 4 Subcell (East PCS)
Cell 2 (C2-NPS)	Cell 3 Subcell (3.2 PCS)	Cell 4 Subcell (West PCS)
Cell 2 (C2-SPS)	Cell 3 Subcell (3.3 PCS)	Cell 5 Subcell (North PCS)*
Cell 3-4-5 Tank Farm		Cell 5 Subcell (South PCS)

\*Monitoring will commence upon initiation of landfilling activities in the Northern Subcell of Cell 5

3. Semi-Annually, DSWA shall monitor leachate for SSWMC Monitoring Plan - Table E parameters for the below monitoring locations:

Cell 1 (C1-PS)	Cell 3 Subcell (3.1 PCS)	Cell 4 Subcell (East PCS)
Cell 2 (C2-NPS)	Cell 3 Subcell (3.2 PCS)	Cell 4 Subcell (West PCS)
Cell 2 (C2-SPS)	Cell 3 Subcell (3.3 PCS)	Cell 5 Subcell (North PCS)*
Cell 3-4-5 Tank Farm		Cell 5 Subcell (South PCS)

\*Monitoring will commence upon initiation of landfilling activities in the Northern Subcell of Cell 5

#### F. ADC Monitoring and Performance and Analytical Criteria

DSWA intends to process, manage, and utilize ADC at the SSWMC landfill as is specified in Condition IV.Y. DSWA shall collect and analyze representative samples in accordance with the Plan of Operation quarterly for the following criteria:

##### 1. Performance Criteria

Percent Moisture .....Minimum 20%  
 Percent Inert .....Minimum 65%  
 Particle Size .....90% must pass through 2-inch screen  
 PCBs .....Must not be in excess of 3 ppm  
 Asbestos .....Must contain <1%

##### 2. Analytical Metals Criteria

Arsenic	Chromium	Mercury
Barium	Copper	Selenium
Cadmium	Lead	Silver

DSWA shall use the most current version of DNREC's Site Investigation & Restoration Section's (SIRS) *Reporting Level Table* as the analytical criteria to meet. The threshold values to be used must be based on the date in which the analysis results were received by DSWA.

## VI. REPORTING

### A. Financial Assurance

No later than December 31<sup>st</sup> of each year, the DSWA shall submit their financial statements for the most recently completed fiscal year along with an updated and reasonably accurate cost estimate of closure and post-closure care for the SSWMC. Cost estimates shall be adjusted for inflation except for new cost estimates not previously made. DSWA shall provide a detailed listing of all projected costs used to estimate the closure and post-closure care costs for the SSWMC. DSWA shall provide the document in one paper copy plus one copy on electronic storage media acceptable to both the DSWA and the Department. The electronic media copy shall be provided as a single electronic document such as a Portable Document Format (.pdf) file.

### B. Annual Operations Report

No later than April 30<sup>th</sup> of each year, DSWA shall submit an Annual SSWMC Operations Report. The DSWA shall provide this report in one paper copy plus one copy by way of electronic media acceptable to both the DSWA and the Department. The electronic media shall be provided as a single electronic document such as a Portable Document Format (.pdf) file. The Annual SSWMC Operations Report shall include the following information:

1. The weight and types of wastes landfilled, and the weight of asbestos received for off-site disposal.
2. The weights (or volumes) and types of daily and intermediate landfill cover materials.
3. A list of all transporters that hauled waste to or from the facility in a commercial capacity required to obtain a Delaware Transporter Permit per Section 7.0 of DRGSW.
4. The weight (or volume) and types of solid waste salvaged.
5. The estimated remaining landfill capacity (volume and time) showing calculations used.
6. Any deviations from the Operation Plan.
7. All construction or corrective work conducted on the site in accordance with approved plans or to achieve compliance with DRGSW and this permit.
8. A discussion of landfilling activities during the past year relevant to operation of the leak detection system, the leachate collection system, and the gas collection system including the date of first waste placement in each subcell or sump area and:
  - a. Modifications to the leachate collection, leak detection, or gas collection systems;

- b. Cleanings and inspections (with assessment) of the leachate collection and leak detection system.
- 9. HHW collection event data to include:
  - a. The weight or volume and types of Household Hazardous Waste collected.
  - b. Waste transporter(s) used.
- 10. Status of the exposed geomembrane (Cells 1 and 2 Long-Term Intermediate Cover). This shall describe construction, intrusions, damages, repairs, performance, compliance, and problems experienced. The DSWA shall also evaluate and report the geomembrane properties.
- 11. ADC Processing data to include:
  - a. A summary of any problems encountered pertaining to ADC processing, management, and utilization and the respective corrective actions;
  - b. The total weight (or volume) of dry waste received at the SSWMC;
  - c. The total weight (or volume) of dry waste processed and landfilled at the SSWMC;
  - d. The total weight (or volume) of processed dry waste utilized as ADC at the SSWMC; and
  - e. The total weight (or volume) of dry waste recycled into other markets.

C. Annual Environmental Monitoring Report

No later than April 30<sup>th</sup> of each year, DSWA shall submit an *Annual SSWMC Environmental Monitoring Report* package, which shall encompass the previous calendar year. DSWA shall provide this annual report in one paper copy and one copy on electronic media. The copy on electronic media shall include a single electronic file such as a Portable Document Format (.pdf) file, which contains both the DSWA cover letter and the *Annual SSWMC Environmental Monitoring Report*. The *Annual SSWMC Environmental Monitoring Report* package shall consist of:

- 1. The DSWA's cover letter for the *Annual SSWMC Environmental Monitoring Report*.
- 2. Gas monitoring data from the previous calendar year to include:
  - a. Gas migration monitoring done in accordance with Condition IV.P of this permit;
  - b. A summary of the facility's compliance with the permit issued pursuant to Delaware's *Regulations Governing the Control of Air Pollution*.
- 3. Tabulation of all data listed below from the previous calendar year and all preceding years. All data should be submitted on paper and electronic media in a format that is acceptable to the Department. Data submitted shall include:

- a. Leachate flow and quality including field parameters;
  - b. Leak detection system flow and quality including field parameters;
  - c. Groundwater elevation and quality data including field parameters;
  - d. Surface water elevation and quality data including field parameters; and
  - e. Rainfall data from the site weather station.
4. Graphical presentation (quality versus time plots) of leachate, groundwater, surface water, and leak detection system liquid quality parameters pH, TDS, COD, TOC, chloride, sulfate, ammonia-nitrogen, and iron.
  5. Graphical presentations (flow rate or volume versus time plots) of leachate collected, leachate recirculated, and leak detection system flows. Rainfall data shall also be plotted on each graph.
  6. Potentiometric maps for each aquifer for each quarter for the past year.
  7. A discussion of any problems encountered during field work, any deviations from the sampling procedures and of any problems with QA/QC procedures. Copies of field notes, laboratory data sheets, and chain-of-custody forms shall be maintained by the DSWA and made available to the DNREC within a reasonable time upon request.
  8. A discussion of the ground and surface water monitoring results, including whether the results indicate a contaminant release from the landfill to groundwater or surface water.
  9. A discussion of the leak detection system monitoring results, including whether the results indicate that the liner is performing within design specifications.
  10. A discussion of the leachate collection system monitoring results, including whether the results indicate that the system is performing within design specifications.
  11. Recommendations for future monitoring and for maintenance or modifications needed in the monitor wells, groundwater control collection system, gas collection system, and/or the leachate collection system.

#### D. Additional Reports

1. Quarterly Environmental Monitoring Report package

DSWA shall submit the results of the quarterly groundwater monitoring within 60 days of the sampling event. The Quarterly Environmental Monitoring Report package shall be provided on electronic media in a format acceptable to both the DSWA and the Department and shall include:

- a. A single electronic file such as a Portable Document Format (.pdf) file containing:

- (1) A cover letter that includes a statement confirming that the accompanying data submittal, the *Historical Environmental Monitoring Database for SSWMC*, has been provided with no changes to previously submitted data or, in the event that administrative corrections must be made to previously submitted data, the DSWA must document the details of such changes in the cover letter. The DSWA shall also include a table of contents for the *Historical Environmental Monitoring Database for SSWMC* in the cover letter. The DSWA shall also summarize the results of the gas migration monitoring conducted during the quarter reported, if that summary has not been included in the *Quarterly Environmental Monitoring Report*.
  - (2) A narrative summarizing the results of the groundwater, surface water, leachate, and leak detection system monitoring done at SSWMC during the quarter reported. As part of this report, DSWA shall include drawings showing potentiometric surface elevations and drawings showing sampling locations for all groundwater, surface water, stormwater, leachate, and gas migration monitoring required by this permit. This report shall also include field data sheets, laboratory reports, and chain of custody forms for the quarter reported as well as a discussion of any problems encountered during fieldwork, any deviations from the sampling procedures and of any problems with QA/QC procedures.
- b. The *Historical Environmental Monitoring Database for SSWMC* which shall contain DSWA's historical environmental monitoring at the SSWMC, updated with the quarterly monitoring data for groundwater, surface water, stormwater, gas migration, and leachate and include the following:
- (1) Tabulation of the following data from all preceding years, updated with the latest quarterly monitoring results:
    - (a) Leachate flow and quality, including field measurements;
    - (b) Leak detection system flow and quality, including field measurements;
    - (c) Groundwater elevation and quality data, including field measurements; and
    - (d) Surface water elevation, flow rate, and quality data, including field measurements.
  - (2) Graphical presentation (quality versus time plots) of leachate, groundwater, surface water, and leak detection system liquid quality parameters pH, TDS, COD, TOC, chloride, sulfate, ammonia-nitrogen and iron.
  - (3) Graphical presentations (flow rate or volume versus time plots) of leachate collected, leachate recirculated, and leak detection flows. Rainfall data shall also be plotted on each graph.
  - (4) Potentiometric maps for each aquifer for each quarter.

- (5) Gas migration monitoring results.
- (6) Meteorological data from the on-site weather station, updated through the quarter being reported.
- 2. If the DSWA is unable to comply with any of the reporting requirements within the permit, DSWA must provide written notice and justification to the Department two (2) weeks prior to the reporting deadline.
- 3. Upon discovery, the DSWA shall report to the Department any intentional or accidental deviation from any approved plan and this permit.

E. Emergency Reporting

- 1. The DSWA shall notify the Department immediately (within 24 hours of discovery) in the event of the following emergencies. If any of these emergencies occur during business hours, DSWA should report to the Department's Solid and Hazardous Management Section by telephone to 302.739.9403. At all other times report the emergency to the Division of Waste and Hazardous Substances' TOLL-FREE 24-HOUR LINE 1.800.662.8802.
  - a. Fire (including receipt of hot loads) or explosion involving the landfill or its control systems.
  - b. Receipt of prohibited waste in the cell.
  - c. Leachate spills exceeding ten (10) gallons.
  - d. Gas levels of 25% LEL or greater detected at the facility boundary or within any structures (as required by Condition IV.P.4 of this permit).
  - e. Damage to the landfill liner system or installed cap components.
  - f. Landfill leachate found to be contaminating surface water.
  - g. Any significant erosion of the waste or cover and/or release of waste from the landfill.
  - h. Any anomalous observations during monitoring events; this includes, but is not limited to, any damage to the monitoring wells or well casing, well obstructions, well-integrity concerns, and well depth.
  - i. Household Hazardous Waste collection event spills: Any HHW waste spills outside of containment or HHW waste spills exceeding 1 gallon (or 10 lbs.) within containment.
- 2. The DSWA shall submit a written notification to the Department within five (5) business days following any event requiring "Emergency Reporting." The notification shall include the following:
  - a. Date and time of occurrence/discovery;
  - b. Date and time of reporting;
  - c. Agencies notified;
  - d. Materials (e.g., leachate, solid waste) and quantities involved;



- e. Narrative describing how the incident occurred and the actions taken by the DSWA and other response personnel;
- f. Report of injuries/damage; and
- g. Proposal for follow-up or remedial actions required and schedule.

F. Assessment of Corrective Measures

1. DSWA shall notify DNREC within seven (7) days after verified analytical data has confirmed that a release has taken place. Confirmation samples shall be collected from the appropriate monitoring points within 14 days of receipt of written approval by the Department. These samples shall be analyzed under a priority schedule for the indicator parameters and Table 1 analytes (Table 1 listed in Section 5.7.3.2 of DRGSW) and any other parameters deemed appropriate by DSWA and DNREC. DSWA shall notify DNREC of the results of the confirmation sampling within seven (7) days of receipt of the results.
2. If confirmation sampling does not indicate that a release has taken place, another round of sampling shall take place to determine whether the results of analysis from the first or second sampling events were anomalous. This re-sampling sampling event shall take place within two (2) weeks of DSWA sending written notification to the Department of their intent to re-sample. The samples shall be analyzed under a priority schedule. DSWA shall notify DNREC of the results of the re-sampling within seven (7) days of receipt of the results.
3. If the re-sampling indicates that no release has taken place, no further action shall be taken by the Department, and monitoring of the sampling location(s) shall be returned to its/their normal monitoring schedule. If the confirmation or re-sampling round of sampling does indicate that a release has taken place, DSWA shall perform an assessment of corrective measures within ninety (90) days of confirmation of the release. This assessment shall include:
  - a. Identification of the nature and extent of the release (which may require construction and sampling of additional wells, geophysical surveys or other measures).
  - b. Re-assessment of contaminant fate and potential contaminant receptors (wells and/or receiving streams).
  - c. Evaluation of feasible corrective measures to:
    - (1) Prevent exposure to potentially harmful levels of contaminants (exceeding performance standards);
    - (2) Reduce, minimize, or prevent further contaminant releases; and
    - (3) Reduce, minimize, or prevent the off-site migration of contaminants.

## **VII. RECORDKEEPING**

### **A. General Recording and Maintenance**

The following information must be recorded and maintained by the DSWA until the end of the post-closure period. This information must be available for inspection, with reasonable notice, by representatives of the Department:

1. Monitoring, testing, and analytical data required by this permit and DRGSW.
2. Copies of field notes, laboratory data sheets, and chain-of-custody forms for each sample analyzed.
3. The quantity and type of wastes received quarterly, the quantity of dry waste processed into ADC, the quantity of off-spec ADC landfilled, and the quantity of ADC utilized at the landfill.
4. Locations of monofilled wastes.
5. Surveys showing the lines and grades of the landfill.

### **B. On-site Records**

The following information shall be kept on-site or made available to the Department within a reasonable period of time after being requested by the Department.

1. Records of odor, dust, or litter complaints received by the facility manager concerning the landfill during the last three (3) years.
2. Records that document that required training has been provided to all appropriate staff.
3. Records of DSWA's periodic inspections of the facility during the last three (3) years to include inspections of the leachate and gas systems, the exposed geomembrane (Cells 1 and 2), leachate seeps, landfill gas migration, and the salvaging stockpile areas.
4. A record of the transporters (company name, address, and telephone number) hauling wastes to and from the facility. Records shall include only those transporters with at least one vehicle having a gross vehicle weight of over 26,000 pounds. DSWA shall retain these records for a period of three (3) years.
5. Copies of all manifests used for the shipment of HHW for at least the last three (3) years.
6. Current training records for personnel handling HHW at the HHW collection events.

7. Drawings showing the locations and extent of all intermediate covers and of daily covers left in-place.
8. Current environmental permits held by the facility.
9. The landfill's remaining permitted capacity.

C. Department Approvals for Alternate Covers

Department approvals for alternate covers (daily and intermediate), unless otherwise approved within this permit, shall be incorporated into the Plan of Operation at least two days prior to the cover material first arriving at the facility. Incorporation shall be accomplished by inserting approvals into Appendix C of the Plan of Operation. Approvals which have been replaced or which have expired are invalid and shall be removed from Appendix D no later than close of business on the date of expiration, or receipt of the revised Approval.

**VIII. LANDFILL CAPPING /CAP-AS-YOU-GO SYSTEMS**

A. Capping/Cap-As-You-Go Requirements

1. Upon closure of the landfill or landfill cell, a capping system shall be installed that will control emissions of gas, promote vegetative cover, and minimize infiltration and percolation of water into, and prevent erosion of, the waste throughout the remaining active life of the facility and/or the post-closure care period.
2. A cap system shall be in place 180 days following final waste disposal activity. The cap system shall be designed in accordance with DRGSW and must be approved by the Department prior to installation.
3. All components of the cap, including the gas control system, shall be constructed in accordance with a Construction Quality Assurance Plan, Closure Plan, and Closure Schedule approved by the Department. A Certification Final Report shall be completed by a third party CQA Consultant and submitted for Department review within 60 days after the landfill or sub-cell has been completed.
4. In order to enhance controls for odors and reduce leachate generation, DSWA may install landfill cap in phases as part of a Cap-As-You-Go Program on portions of Cells 3, 4, and 5 as long as the work does not interfere with landfill operations or control systems and the Department has approved the design and construction quality control measures. In order for the permittee to use Cap-As-You-Go portions as a final cap system at the time of landfill closure, DSWA will need to demonstrate that these portions of the landfill were installed in accordance with DRGSW and were protected from damage between installation and time of landfill closure. This must include the DSWA's documentation in the final report required by Section 5.10.4.7 of DRGSW

certifying the proper construction and the protection of the Cap-As-You-Go portions of the landfill.

**B. Final Slopes**

1. The grades of the final slope shall be constructed in accordance with the following minimum standards:
  - a. The final grades of the top slope, after allowing for settlement and subsidence, shall be designed to promote run-off.
  - b. The final grades of the side slopes shall be a maximum three horizontal to one vertical (3H:1V).
2. The top and side slopes shall be maintained to prevent erosion of a cap system(s) and to ensure complete vegetative cover.

**C. Protection of the Cap-As-You-Go Portions until Facility Closure**

1. DSWA shall maintain the integrity and effectiveness of the Cap-As-You-Go Portions, including making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events. DSWA shall prevent run-on and run-off from eroding or otherwise damaging the Cap-As-You-Go Portions.
2. DSWA shall provide for, and maintain a permanent, long-lived vegetative cover on the Cap-As-You-Go Portions of the landfill. DSWA shall reseed the cover if insufficient vegetation exists to stabilize the surface.
3. Standing water shall not be allowed on any Cap-As-You-Go Portions of the landfill.
4. Opening burning shall not be allowed on any Cap-As-You-Go Portions of the landfill.
5. Unless approved in advance by the Department, no activity shall be conducted on any Cap-As-You-Go Portions of the landfill which will disturb the integrity of the cap system.
6. DSWA shall weekly inspect Cap-As-You-Go Portions and complete an inspection/maintenance form for the inspection. Deficiencies shall be identified and corrected as soon as practicable.

**IX. CLOSURE AND POST-CLOSURE CARE**

**A. Closure in Accordance with DRGSW**

The DSWA shall close the completed landfill or landfill cells in accordance with DRGSW.

B. Notification

One year prior to the anticipated closure of the facility, the DSWA shall provide a written notice of intent to close the landfill, anticipated post-closure use of the facility, and a proposed schedule. At least 180 days prior to the expected date when wastes will no longer be accepted for disposal at the SSWMC, DSWA shall submit a comprehensive closure plan to the Department.

C. Post-closure Care

Post-closure care shall be in accordance with DRGSW. Post-closure care shall be in accordance with the post-closure care permit and the approved post-closure care plan approved by the Department.

D. Post-closure Land Use

The DSWA shall implement the post-closure land use plan approved by the Department.

E. Deed Notice

The DSWA shall record an environmental covenant, per Delaware Code Title 7, Chapter 79, Subchapter II, with the deed to the facility property that will in perpetuity notify a potential purchaser of the property the land has been used as a solid waste disposal site and the use of the land is restricted under DRGSW.

## **PERMIT MODIFICATION SYNOPSIS**

October 6, 2000: The permit was modified to incorporate the *Delaware Solid Waste Authority Permanent HHW (and Conditionally Exempt Small Quantity Generator) Facility Operations, Maintenance and Safety Manual*, Revised August 4, 2000 (the HHW Operations, Maintenance and Safety Manual). The modification also prohibits HHW storage on-site overnight.

May 1, 2001: Permit SW-00/01 was modified to reflect the changes proposed in the Settlement Agreement executed by the Secretary of DNREC on February 22, 2001 (as a result of DSWA appeals to the Environmental Appeals Board 2000-06 and 2000-08).

July 11, 2001: The permit was modified to incorporate the DSWA's January 31, 2001 and June 29, 2001 revisions to the *Operations Plan (leachate recirculation and C&D waste salvaging)*. The modification also incorporated the DSWA's May 2001 revision to the *Monitoring Program for the Southern Solid Waste Management Center*. The modifications are considered minor in accordance with Section 4.A.7 of DRGSW.

November 18, 2002: The permit was modified to incorporate the DSWA's November 14, 2002 revision to the *Operations Plan* which added a provision for salvaging of Mobile Home Units. The modification is considered minor in accordance with Section 4.A.7 of DRGSW.

May 4, 2004: The permit was modified to include DSWA's April 12, 2004 revision to the *Operations Plan* (Section IV.A). This modification was initiated by the Solid & Hazardous Waste Management Section to establish a formal recordkeeping requirement for written approvals obtained by the DSWA for alternate cover materials (Section VII.C). The modifications (Sections IV.P and Q) also establish performance standards for alternate cover materials. The modification is considered minor in accordance with Section 4.A.7 of DRGSW.

June 14, 2006: Permit SW-00/01 was modified to reference the revised Operations Plan (Section IV.A.), which the DSWA updated to include the new Special Waste Policy and additional procedures for managing mobile home units. References to Conditionally Exempt Small Quantity Generator waste was removed from the permit since DSWA no longer accepts such waste as part of the household hazardous waste (HHW) collection program (sections IV.X, VI.B, C, D, and VII.B). The permit was modified to extend the emergency reporting deadline (the written report only) from 1 business day to 5 business days. The permit was modified to be consistent with other DSWA permits regarding salvaging operations (Section IV.O). The permit was modified to reference the *HHW Operating and Site Safety Plan as revised September 2002* (Section IV.X.1). This was a minor modification in accordance with Section 4.A.7 of DRGSW.

August 1, 2006: The Solid & Hazardous Waste Management Section modified permit SW-00/01 to include the revised date of the Operations Plan. The Delaware Solid Waste Authority changed the revised date on the title page of the Operations Plan to June 14, 2006 and that date has now referenced in Section IV.A of permit SW-00/01. The Section also updated the reference to Analytical Procedures in Section V.F. of the permit. This was a minor permit modification in accordance with Section 4.A.7 of DRGSW.

March 19, 2010: In response to the DSWA's application to construct and operate a landfill (cell 5), the Solid & Hazardous Waste Management Section modified permit SW-00/01 to include the construction of cell 5 and to extend the date of permit expiration until March 19, 2020 to allow for the operation of cell 5. This was a major permit modification in accordance with Section 4.1.7 of DRGSW.

November 22, 2013: The Solid & Hazardous Waste Management Section modified permit SW-00/01 to install new reporting requirements in Section VI. The new requirements provide more direction to the

permittee for reporting via electronic media. The modification also corrects the date cited for the Plan of Operations in Section IV.A of the permit. The modification incorporates the revised Operations Manual used by DSWA for maintenance and inspection of the long-term intermediate cover on cell 1 & 2 and cited in Section III.B of the permit. This was a minor permit modification as defined by Section 4.A.7 of ~~the~~ DRGSW.

**[INSERT DATE OF MODIFICATION]:** The SHWMS modified Permit SW-00/01 to incorporate the requirements of SSWMC's Beneficial Use Determination (BUD #28), which the SHWMS has decided not to renew as an independent permit. This modification also clarifies aspects of the current monitoring program, removes and/or updates outdated information within the permit and the Plan of Operation, and makes typographical and general formatting changes for ease of use. General formatting includes the reorganization of current permit conditions to mimic other permits issued by the SHWMS. This modification is considered major in accordance with Section 4.1.7 of DRGSW. (SW-00/01)